

Air Quality Conformity Analysis

Agua Caliente Cultural Museum Road and Drainage Improvements Project

Palm Springs, California

South Coast Air Quality Management District

08-Riv-Local Assistance

Federal-Aid Project Numbers

PLHDL06 5282 (032) and HPLUL 5282 (033)

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Chapter 1. Introduction and Project Description

This Air Quality Conformity Analysis contains the information that is required by FHWA to make an air quality conformity determination for the Agua Caliente Cultural Museum Road and Drainage Improvements project pursuant to Section 6005 of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU). This analysis has been prepared to be consistent with FHWA's June 21, 2007 guidance on Project-Level Conformity Determinations and NEPA Assumption and Conformity Analysis Documentation checklist.

1.1. Project Description

The project is located in the City of Palm Springs and consists of a program that was earmarked to develop and enhance public access to the new Agua Caliente Cultural Museum being constructed at the southeast corner of Tahquitz Canyon Way and Hermosa Drive. The project also includes development of road and signage improvements including development of road improvements on Hermosa Drive, Tahquitz Canyon Way, Arenas Road, and Baristo Road.

The purpose and need for the project are identified in the following statement:

This project will develop and enhance public access to the new Agua Caliente Cultural Museum (ACCM). A native cultures museum focused on interpreting the history and culture of the Agua Caliente Band of Cahuilla Indians and other Cahuilla and Native peoples, the ACCM will be a place of both local and national significance; a place to teach new generations of the rich cultural history of the region. This project will enhance leased Indian land to create a worldclass museum, providing economic development and community enhancement for the City of Palm Springs and the surrounding Southern California area. With these funds we will be able to create road improvements, parking and access necessary for the public to enjoy this facility and its programs.

The preferred alternative consists of the design and construction of street and storm drainage improvements to benefit the site of the future Agua Caliente Cultural Museum located at the southeast corner of the intersection of Tahquitz Canyon Way and Hermosa Drive (see Figure 1).

The proposed storm drainage improvements include the construction of a storm drain system (defined as Palm Springs Line 9 of the Master Plan of Drainage for the Palm Springs Area) extending in Hermosa Drive from the Baristo Channel to Arenas Road. The planned storm drain system is comprised of the following items: 650± feet of 48" RCP [Q10=85 cfs] – Baristo Channel to Baristo Road; 650± feet of 30" RCP [Q10=45 cfs], and associated storm drain

improvements. Construction of the storm drain system will require excavations as much as 8 feet deep, or more, depending upon final design.

The following capacity-increasing improvements are proposed for Hermosa Drive and intersecting streets:

Roadway Improvements

General Roadway Improvements:

1. Widen the easterly side of Hermosa Drive from Tahquitz Canyon Way south to Arenas Road (approximately 650 feet). The widening would not add any new lanes, and the street would remain a two-lane roadway;
2. Extension of Hermosa Drive from Arenas Road south to Baristo Road (approximately 690 feet).

Baristo Road Intersection

1. Remove existing PCC cross gutter on the easterly leg of Baristo Road and Hermosa Drive and install catch basins to the proposed Storm Drain Line 9;
2. Remove and replace existing curb ramps on the southeasterly and southwesterly corners of the intersection and replace with ADA-compliant curb ramps;
3. Install roadway widening improvements to the northerly side of the westerly leg of Baristo Road, including ADA-compliant curb ramps on the northeasterly and northwesterly corners of the intersection.

Arenas Road Intersection

1. Remove existing PCC cross gutter on the westerly leg of Arenas Road and Hermosa Drive and install catch basins to the proposed Storm Drain Line 9;
2. Remove and replace existing curb ramp and spandrel on the northwesterly corner of the intersection;
3. Install ADA-compliant curb ramps at the northeasterly, southeasterly, and southwesterly corners of the intersection;

4. Install the easterly intersection leg of Arenas Road to the BC/EC's of the curb ramps (if Arenas Road is to be expanded to the east of Hermosa Street).

Tahquitz Canyon Way Intersection

1. Remove and replace existing PCC cross gutter and spandrels on the southerly leg of the intersection;
2. Remove existing handicap access ramps at the southeasterly and southwesterly corners of the intersection and replace with ADA-compliant curb ramps.

Project construction is anticipated to last approximately four months.

1.2. Air Quality Regulatory Framework

Table 1 shows that the proposed project is located in an area that is nonattainment for ozone and both coarse particulate matter (PM10) and fine particulate matter (PM2.5). The proposed project is not located in a designated maintenance area. This analysis focuses on these criteria pollutant(s).

Table 1. Project Area Attainment Status

Criteria Pollutant	Federal Attainment Status
Ozone (O ₃)	Nonattainment
Nitrogen Dioxide (NO ₂)	Attainment-Unclassified
Carbon Monoxide (CO)	Attainment-Unclassified
Particulate Matter (PM10)	Nonattainment
Particulate Matter (PM2.5)	Nonattainment

Although the project is located east of the South Coast Air Basin in the Salton Sea Air Basin (SSAB), the transport air pollution contaminants from the South Coast Air Basin is a major contributor to the area's air pollution problems. To address this regional issue, the Riverside County portion of the SSAB which encompasses the project, and the South Coast Air Basin, are under the jurisdiction of the South Coast Air Quality Management District (SCAQMD).

1.3. Public Review Comments Related to Air Quality Conformity

No comments related to the air quality conformity determination were received during the initial study public review period of the Agua Caliente Cultural Museum Road and Drainage Improvements project.

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Chapter 2. Regional Conformity

The Agua Caliente Cultural Museum Road and Drainage Improvements project was included in the regional emissions analysis conducted by the Southern California Association of Governments (SCAG) for the conforming SCAG *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future (2012 RTP/SCS)*. The project's design concept and scope have not changed significantly from what was analyzed in the 2012 RTP/SCS. This analysis found that the plan and, therefore, the individual projects contained in the plan, are conforming projects, and will have air quality impacts consistent with those identified in the state implementation plans (SIPs) for achieving the National Ambient Air Quality Standards (NAAQS). FHWA determined the RTP to conform to the SIP on April 4, 2012. Additional documentation related to the regional emissions analysis is contained in Appendix B.

The Agua Caliente Cultural Museum Road and Drainage Improvements project is also included in the 2011 Federal Transportation Improvement Program (FTIP), prepared by SCAG (SCAG, 2010) and the FTIP consistency amendment No. 24, scheduled for approval in mid-June 2012. The FTIP is prepared to implement projects and programs listed in the RTP and is developed in compliance with state and federal requirements. The project's open to the public year is consistent with (within the same regional emissions analysis period as) the construction completion date identified in the RTP. The FTIP gives priority to eligible Transportation Control Measures (TCMs) identified in the SIP and provides sufficient funds to provide for their implementation. FHWA determined the FTIP to conform to the SIP in September 2010. Documentation related to the public and interagency consultation process conducted to develop the 2011 FTIP is contained in Appendix B.

Chapter 3. Project-Level Conformity

3.1. Carbon Monoxide Hot-Spot Analysis

Conformity at the project-level also requires “hot spot” analysis if an area is “nonattainment” or “maintenance” for CO. A region is a “nonattainment” area if one or more monitoring stations in the region fail to attain the relevant standard. As identified in Table 1, the project is located in a region that is designated as Unclassified/Attainment for CO. Therefore, no further analysis is required.

3.2. PM_{2.5}/PM₁₀ Hot-Spot Analysis

The proposed project is not considered a project of air quality concern (POAQC) for PM₁₀ and/or PM_{2.5} because it does not meet the definition of a POAQC as defined in EPA’s Transportation Conformity Guidance. According to the EPA Transportation Conformity Guidance (final Rule), March 10 2006, the project would be considered POAQC if any of the following stipulations apply:

- *New or expanded highway projects that have a significant number of or significant increase in diesel vehicles (significant number is defined as greater than 125,000 Annual Average Daily Traffic (AADT) and 8 percent or more of such AADT is diesel truck traffic, or in practice 10,000 truck AADT or more regardless of total AADT; significant increase is defined in practice as a 10% increase in heavy duty truck traffic).*

The proposed Agua Caliente Cultural Museum Road and Drainage Improvements project consists of improvements to an existing roadway and construction of a storm drain system. The proposed street improvements are consistent with the City’s General Plan Circulation Plan, which identifies Hermosa Drive as a collector (2-lane undivided) roadway extended from East Tahquitz Canyon Way to Baristo Road. The proposed drainage improvements (defined as Palm Springs Storm Drain Line 9) are part of the City’s Master Plan of Drainage. The proposed project is not a new highway or highway expansion project and in addition, will not include the provision of new permanent vehicles. By its very nature, the project will not instigate an increase in diesel vehicles from project operations. For instance, once the proposed roadway and drainage improvements are implemented, there will be no resultant increase in automobile trips to the area because the improved facilities will not require daily visits.

- *Projects affecting intersections that are at a Level of Service D, E, F, with a significant number of diesel vehicles, or that that will change to Level of Service D, E, or F because of increased traffic volumes from a significant number of diesel vehicles related to the project.*

The proposed Agua Caliente Cultural Museum Road and Drainage Improvements project consists of improvements to an existing roadway. By its very nature, the project will not instigate an increase in diesel vehicles from project operations. For instance, once the proposed roadway and drainage improvements are implemented, there will be no resultant increase in automobile trips to the area because the improved facilities will not require daily visits. There are currently not a significant number of diesel vehicles traversing project intersections and the project will not change affected intersection of Level of Service D, E, or F.

- *New bus and rail terminals and transfer points that have a significant number of diesel vehicles congregating at a single location.*

The proposed Agua Caliente Cultural Museum Road and Drainage Improvements project consists of improvements to an existing roadway and construction of a storm drain system. The proposed project does not include the provision for new bus or rail terminals.

- *Expanded bus and rail terminals and transfer points that significantly increase the number of diesel vehicles congregating at a single location.*

The proposed Agua Caliente Cultural Museum Road and Drainage Improvements project consists of improvements to an existing roadway and construction of a storm drain system. The proposed project does not include the provision for new bus or rail terminals.

- *Projects in or affecting locations, areas, or categories of sites which are identified in the PM2.5 or PM10 implementation plan or implementation plan submission, as appropriate, as sites of possible violation.*

The project is subject to the SCAQMD's Air Quality Management Plan (AQMP) and Coachella Valley PM10 State Implementation Plan (CVSIP). There are no sites of possible violation in the project vicinity identified in either of these two air quality planning documents and project type is not identified in either as posing a possible violation.

PM hot-spot analysis is not required. The project has undergone Interagency Consultation (IAC). IAC participants concurred that the project is not a POAQC (see Appendix D).

3.3. Construction-Related Hot-Spot Emissions

As construction of the project is expected to last approximately four months, construction-related emissions were not considered in the hot-spot analysis.

Insert Figure 1 Project Location

1. References

California Air Resources Board (CARB). 2010. *Area Designations Maps / State and National*. December 2009 – September 2010. <http://www.arb.ca.gov/desig/adm/adm.htm>

Southern California Association of Governments (SCAG). 2012. *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future*. Adopted April 2012.

Southern California Association of Governments (SCAG). 2010. *2011 Final Federal Transportation Improvement Program*. Adopted September 2010.

Appendix A. Public Review Comments and Responses Related to Air Quality Conformity

Not Applicable

Appendix B. Additional Documentation Related to Regional Conformity

Regional Emissions Analysis Conducted for Conforming RTP

The regional emissions analysis found that regional emissions will not exceed the SIP's emission budgets for mobile sources in the build year, a horizon year at least 20 years from when conformity analysis started, and additional years meeting conformity regulation requirements for periodic analysis. The regional emissions analysis was based on the latest population and employment projections for the City of Palm Springs that were adopted by SCAG at the time the conformity analysis was started in 2010. The modeling was conducted using current and future population, employment, traffic, and congestion estimates. The traffic data, including the fleet mix data, were based on the most recently available vehicle registration data included in the EMFAC2007 model. The EMFAC2007 model, developed by the California Air Resources Board, is the most recent emissions model approved for use in California by the U.S. EPA at the time of this analysis.

Public and Interagency Consultation Process for TIP

The 2011 FTIP was developed in accordance with SCAG policies for community input and interagency consultation procedures. These procedures ensure that the public has adequate opportunity to be informed of the FTIP development process and encourages public participation and comment. Comments and responses to comments received on the RTP and FTIP can be found at the following websites: <http://rtpscs.scag.ca.gov/Pages/About-the-RTP.aspx> and <http://www.scag.ca.gov/ftip/2011/approved.htm>.

Appendix C. Carbon Monoxide Hot-Spot Analysis Modelling Procedures

Not Applicable

Appendix D. PM Interagency Consultation

Appendix E. PM Hot-Spot Analysis

Not Applicable